

REMARKS

Claims 1-20 are pending.

Claim 1 is amended with entry of this amendment.

Rejections under 35 USC 102(b)

Claims 1-2, 6, 10-11, and 16-18 are rejected under 35 USC 102(b) as anticipated by Nourai et al.

Firstly, the applicant respectfully suggests that the examiner has made an erroneous rejection under 102(b). The Nourai patent was filed 11 Jan 2002 and published 9 Dec 2003. The priority application to the present application was filed 9 Oct 2002 (60/417,260). Nourai was not published more than 1 year before the present application was filed. This rejection under 35 USC 102(b) should therefore be withdrawn.

35 U.S.C. 102(b) “A person shall be entitled to a patent unless —
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of the application for patent in the United States....”

Secondly, the Nourai disclosure does not teach or suggest the invention as presently claimed. The Nourai disclosure does not teach a device that applies a perpendicular force to the power line displacing it laterally and then releasing the line suddenly, providing lateral vibration to the suspended line...”.

The present amendments have been made to emphasize the application of lateral force and the ensuing lateral vibration. The Nourai disclosure teaches a device that uses an “unbalanced weight” which, as it rotates, would cause the line to oscillate with a circular motion, not with a lateral motion. Nowhere in the patent document does Nourai mention or suggest application of a lateral force/movement, which is a key element of the claimed invention (see claim 1).

Furthermore, the Nourai disclosure requires having an “unbalanced weight” while, in the current application, no unbalanced weight is necessary for the invention to function.

Thirdly, the Nourai disclosure teaches about a device to break off ice from the line after it has been formed and does not teach or suggest a device that prevents ice from forming on lines. The present invention emphasizes methods for the prevention of the ice buildup rather than breaking the ice after it has been built up. This distinction is another key element of the current invention.

Fourthly, the Nourai disclosure does not teach or suggest a device that can be positioned between and supported by parallel lines, as in the case of bundled conductors which experience worse ice buildups than a single line. Another key element of the current invention is its ability to be installed on bundled conductors, use these lines against each other as it applies lateral force to them (that is by applying a force to one line it automatically applies the opposing force to the parallel line), and prevent ice buildup on all lines in the bundled conductor system.

For the above reason, all the rejections (102(b) and 103(a)) in view of Nourai should be withdrawn.

Claims 1-2, 6, 10-11, and 16-18 are rejected under 35 USC 102(b) as anticipated by LaForte et al. LaForte does not teach or suggest a device that applies a perpendicular force to the power line displacing it laterally and then releasing the line suddenly, providing lateral vibration to the suspended line...”.

LaForte discloses a device that uses an electromagnetic pulsing means and that sends pulses down the line. Nowhere in the patent document does LaForte mention or suggest a device that applies a perpendicular force to the power line. Nor does LaForte teach or suggest a device that is capable of displacing the lines laterally. Nor does LaForte teach or suggest a device that is capable of providing lateral vibration to the suspended line.

For the above reason, the rejections (102(b) and 103(a)) in view of Nouari should be withdrawn.

Rejections under 35 USC 103(a)

Claims 1-20 are rejected under 35 USC 103(a) over Allaire in view of LaForte.

As the examiner says, Allaire does not teach or suggest the limitations of claim 1, i.e., a device that applies a perpendicular force to the power line displacing it laterally and then releasing the line suddenly. But neither does LaForte, for the reasons set out above. The applicant therefore respectfully asks for these rejections under 35 USC 103(a) to be withdrawn.

Claims 3-5, 7-9, 12-15, and 18-20 are rejected under 35 USC 103(a) over Allaire in view of LaForte or Nouari. But neither LaForte nor Nouari teach or suggest a device that applies a perpendicular force to the power line, nor a device that prevents ice from building on the line, and nor a device that can be installed on and between parallel lines (bundled conductors). Nor does LaForte teach or suggest a device that is capable of displacing the lines laterally. Nor does LaForte teach or suggest a device that is capable of providing lateral vibration to the suspended line. The fact that LaForte discloses an energy storage module does not overcome the missing element of lateral force or movement that is required by the present invention.

The applicant therefore respectfully asks for these rejections under 35 USC 103(a) to be withdrawn.

Date of invention and reduction to practice by Shirmohamadi predates date of filing of Nourai application.

The inventor, Manuchehr Shirmohamadi, developed the initial designs for the current application in 1999 and has documents showing that fact, including witnesses and a sealed package sent through US mail on December 22, 1999. Furthermore, Shirmohamadi presented the general concept of his invention, without disclosing its design details as presented in the current application, to various entities, including electric utilities and companies involved with overhead transmission lines, starting in the year 2000 for fund raising to develop the “DEICER” as a new product. The first such presentation was made in person to Hydro Quebec (the Electric Utility of

Quebec, Canada) on October 17, 2000 in Montreal, Canada, followed by similar presentations or phone discussions to other entities. The applicant would be happy to swear to this in a declaration and to submit supporting evidence.

CONCLUSION

In light of the above amendments and remarks, the inventor submits that the present application is fully in condition for allowance. If it would help, please call the inventor, Manuchehr Shirmohamadi at 510-594-0300 extension 202.

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PTO/SB/97 (04-07)


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